## UNITED STATES COURT OF APPEALS

## FOR THE SECOND CIRCUIT

August Term, 2003

(Argued: January 13, 2004

Decided: February 13, 2004)

Docket No. No. 03-7565

ROBERT ZAREMBA, TOMASZ TYLENDA, ESTATE OF ARTHUR PIETRASZKO, ZDZISLAW PIETRASZKO and ALICJA PIETRASZKO, individually and as the Parents of ARTHUR PIETRASZKO, and ALICJA PIETRASZKO as the Administratrix of the ESTATE OF ARTHUR PIETRASZKO,

Plaintiffs-Appellants,

v.

GENERAL MOTORS CORPORATION, JOHN DOES 1-5 and ABC CORPORATION,

Defendants-Appellees.

Before: CARDAMONE\* and CABRANES, Circuit Judges, and MUKASEY, District Judge.\*\*

Appeal from a grant of summary judgment to defendant by the United States District Court for the Eastern District of New York (Charles R. Wolle, Judge of the United States District Court for the Southern District of Iowa, sitting by designation). Plaintiffs originally brought an action in New York state court, alleging that they were injured in a one-car rollover accident involving an automobile, manufactured by defendant, that contained a design defect. Defendant removed the case to district court and challenged as inadmissible the proffered testimony of plaintiffs' experts

<sup>\*</sup> Judge Reena Raggi was originally a member of the panel in this case, but recused herself prior to oral argument. Oral argument was held before Judge Cabranes and Judge Mukasey, and thereafter Judge Cardamone was selected as a third panel member.

<sup>\*\*</sup> The Honorable Michael B. Mukasey, Chief Judge of the United States District Court for the Southern District of New York, sitting by designation.

that an alternative automobile design would have reduced the injuries that the plaintiffs suffered. After holding a hearing pursuant to *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the District Court excluded the testimony of plaintiffs' experts, citing, among other reasons, the experts' failure to create a drawing or model of the proposed alternative design, or to test such a design.

Affirmed.

ROBERT A. SKOBLAR (Brent Barton, on the brief), Englewood, NJ, for Appellants.

LOREN H. BROWN (Joseph G. Finnerty, Jr., Christopher Campbell, *of counsel*), Piper Rudnick, LLP, New York, NY, *for Appellees*.

JOSÉ A. CABRANES, Circuit Judge:

The question presented is whether there was error in a decision by the United States District Court for the Eastern District of New York (Charles R. Wolle, Judge of the United States District Court for the Southern District of Iowa, sitting by designation) to exclude the testimony of plaintiffs' experts as unreliable and to enter summary judgment for defendant General Motors Corp. ("GM").

# Background

On March 18, 1996 around 2:00 a.m., the three plaintiffs—two passengers and the driver of a 1994 Pontiac Trans Am car (the "Trans Am")—were involved in a one-car rollover accident. The driver had a blood alcohol content of .172, and all three occupants were unbelted. While driving at speeds approaching 100 mph, the driver lost control at a fork in the road, and the Trans Am struck a curb, rolled, and eventually crashed into an overpass railing. The driver was killed, the back seat passenger suffered severe brain damage, and the front seat passenger escaped with soft tissue injuries.

Some time prior to the accident, the Trans Am had been "totaled" by a prior owner; one of the plaintiffs purchased the Trans Am in 1995 and had it rebuilt. The Trans Am was a "T-top" model, with two removable glass roof panels. On a T-top car, the panels are separated at the centerline of the roof by a longitudinal bar that connects the top of the windshield to the top of the rear hatch. When the T-top panels are removed, the effect is an open-air environment similar to a convertible, but with a bar running down the center of the car where the roof would otherwise be.

Plaintiffs originally brought an action in New York state court, alleging that they were injured because of a design defect in the Trans Am, and GM removed to district court. Plaintiffs focused on two theories of design defect that they claim enhanced the injuries they sustained in the crash: a substandard roof design, and the absence of laminated glass in the side windows, roof, and rear hatch. Plaintiffs' theory of liability is as follows. (1) During the accident, the Trans Am's T-top panels became detached and shattered, and the side and rear windows shattered. (2) The driver and backseat passenger were both ejected through the portals created by the detached panels and shattered glass, and both were injured by contact with hard surfaces outside the car: The driver was ejected through the roof, and hit his head on a guardrail outside the vehicle, while the backseat passenger was ejected through the glassless rear hatch and landed in the road. (3) The Trans Am could have had an alternative safer design in which (a) instead of a single longitudinal bar connecting the windshield to the rear hatch along the center of the car, there were two longitudinal bars or "roof rails," one along each side of the car; and (b) the side and rear windows and T-top panels, instead of being made of tempered glass, were made of laminated glass, which is allegedly more resistant to shattering. (4) If plaintiffs had been driving a vehicle of the alternative safer design, they would not have sustained the injuries they did.

In support of their theories of design defect, plaintiffs intended to call, as expert witnesses at trial, Donald Phillips and Joseph Burton. Phillips, an engineer, would testify as to his reconstruction of the accident and as to an alternative safer design. Burton, a medical doctor and biomechanical expert, would testify that plaintiffs' injuries would not have been so serious if they had been riding in Phillips's alternative design.

GM challenged the testimony by Phillips and Burton as inadmissible under the Federal Rules of Evidence, contending that the proffered testimony was not grounded in a reliable methodology. The District Court agreed, holding that plaintiffs had not met their burden of showing that the proffered opinions satisfied Federal Rule of Evidence 702. First, the Court found that Phillips (1) had not examined or tested the Trans Am; (2) had no measurements or calculations to support his theory of how the accident occurred; (3) made no drawing or model ("prototype") of his hypothetical alternative design for a Trans Am; (4) conducted no test of his design; (5) offered no calculations in support of the safety of his design; (6) had not subjected his alternative design to peer review and evaluation; and (7) presented no evidence that other designers or manufacturers in the automobile design community accepted the untested propositions underlying his opinions. The Court concluded that "[e]ssentially the Phillips design has no concrete basis in reality."

With respect to Burton, the Court found that (1) his opinions were speculative because they were based on Phillips's unsupported conjecture of how the accident occurred; (2) Burton could not say with sufficient certainty when during the rollovers and final crash the plaintiffs sustained their injuries, how their bodies moved within the vehicle, or when they were ejected, if ejected in the way Burton described; and (3) Burton was on "even shakier ground" in opining what injuries plaintiffs would have sustained had Phillips's hypothetical alternative design been used.

<sup>&</sup>lt;sup>1</sup> After the accident, title to the Trans Am was transferred to a towing company, which sold some parts and crushed the remainder for scrap.

The District Court concluded that, while Phillips and Burton were "qualified experts in their fields," their testimony was "based on unfounded speculation and [was] unreliable under *Daubert* principles." After its exclusion of the testimony of plaintiffs' experts, the Court granted summary judgment to defendant.

## Discussion

We review a district court's decision to exclude expert testimony for abuse of discretion, Gen. Elec. Co. v. Joiner, 522 U.S. 136, 143 (1997), and we have explained that "[a] decision to admit or exclude expert scientific testimony is not an abuse of discretion unless it is 'manifestly erroneous," Amorgianos v. Nat'l R.R. Passenger Corp., 303 F.3d 256, 265 (2d Cir. 2002).

Rule 702 of the Federal Rules of Evidence, which governs the admissibility of expert testimony, provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702. In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 597 (1993), the Supreme Court held that the Federal Rules of Evidence "assign to the trial judge the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." The Court explained in *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999), that the objective of the "gatekeeping" requirement of *Daubert* and Rule 702 is "to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field."

In *Kumho Tire*, the Supreme Court held that the trial judge's gatekeeping obligation applies not only to testimony based on "scientific" knowledge, as in *Daubert*, but also to testimony based on "technical" or "other specialized" knowledge. *Id.* at 141. The Court emphasized that the test for reliability is "flexible," *id.*, and stated that a trial judge may, but need not, consider the specific factors identified in *Daubert*:

- (1) whether a theory or technique can be and has been tested;
- (2) whether it has been subjected to peer review and publication;
- (3) whether it has a high known or potential rate of error; and
- (4) whether it is generally accepted in the relevant scientific community.

Id. at 149-50 (citing *Daubert*, 509 U.S. at 592-94). A district court should consider the *Daubert* factors "where they are reasonable measures of the reliability of expert testimony," *id.* at 152; the list of factors "neither necessarily nor exclusively applies to all experts or in every case," *id.* at 141.

Notably, the trial judge has "the same kind of latitude in deciding *how* to test an expert's reliability . . . . as it enjoys when it decides *whether* that expert's relevant testimony is reliable." *Id.* at 152.

We cannot say that the District Court committed manifest error in excluding the testimony of plaintiffs' experts. As an initial matter, we note that the reliability of Phillips's testimony is the central issue on this appeal. If his testimony regarding a safer alternative design is speculative and unreliable, then Burton's testimony—that the hypothetical design would have reduced the injuries in this accident—is even more so.

Plaintiffs have satisfied none of the four factors identified in *Daubert* with respect to Phillips's testimony about a safer alternative design: (1) Phillips has not tested his design; (2) he has not subjected it to peer review or publication; (3) his design does not have a "known rate of error," since it has not been tested; and (4) Phillips has not shown general acceptance either of his design or

of his methodology. Numerous courts have excluded expert testimony regarding a safer alternative design where the expert failed to create drawings or models or administer tests. *See Bourelle v. Crown Equip. Corp.*, 220 F.3d 532, 536-38 (7th Cir. 2000) (upholding the exclusion of plaintiff's design expert where he "had not done any scientific testing to support his alternative design theory" and had not prepared any drawings of his alternative forklift design); *Watkins v. Telsmith, Inc.*, 121 F.3d 984, 991-92 (5th Cir. 1997) (upholding the exclusion of an expert who "did not even make any drawings or perform any calculations" to support his alternative gravel conveyor design); *Peitzmeier v. Hennessy Indus., Inc.*, 97 F.3d 293, 297 (8th Cir. 1996) (upholding the exclusion of an expert who only offered a "series of rough sketches" of an alternative tire changer). In *Brooks v. Outboard Marine Corp.*, 234 F.3d 89, 92 (2d Cir. 2000), this Court upheld the exclusion of an expert who, among other "shortcomings," "never attempted to reconstruct the accident and test his theory" of a safer outboard motor design.

Plaintiffs argue that, although Phillips did not perform any test on his alternative design, he was entitled to rely on tests that GM itself had performed on a vehicle similar to Phillips's design. Plaintiffs assert that in 1987, GM performed tests on the Trans Am's predecessor model to determine whether the T-top structure could be modified to, in plaintiffs' words, "make a stiffer" car. The purposes and results of these tests were embodied in a memorandum from GM's engineers (the "GM Memo"), which referred to testing of a "modified T-top design" that included "modified cobbled longitudinal bars," apparently similar to the alternative design that Phillips advances. The GM Memo concluded that such a modified design would have improved "bending performance" and "torsional performance." In other words, just as a car with a solid roof would be more difficult to twist than a convertible, so a modified T-top with side roof rails would be more difficult to twist than a T-top with a single longitudinal bar. Plaintiffs argue that GM's own tests establish that

Phillips's design would result in a stiffer and hence more crashworthy car, making Phillips's testing of such a design unnecessary.

The GM Memo does not, however, show that a modified T-top—even if stiffer than the Trans Am involved in the accident—is thereby less likely to lose its T-tops and side and rear windows in a crash. Even accepting that the GM Memo involved a modified T-top similar to the design advanced by Phillips, and that GM's tests demonstrated that the modifications improved the car's torsional and bending performance, Phillips offers no tests, models, calculations, or drawings to show that the improved performance would prevent the T-tops and windows from giving way in the high-speed accident in this case. It is not enough for Phillips to testify reliably that his hypothetical alternative design would, in some respects, have better performance than the Trans Am involved in the accident; to provide relevant testimony, Phillips must also establish that his hypothetical design would have resulted in greater safety in the rollover accident at issue. Though he is apparently willing to testify to this, *Daubert* and Rule 702 require that this testimony be reliable. In the absence of drawings, models, calculations, or tests, it was not manifest error for the District Court to find that Phillips's testimony was insufficiently reliable.

Indeed, it appears that the District Court gave plaintiffs and Phillips the benefit of a substantial doubt when it found Phillips was a "qualified expert[] in [his] field[]," and subjected his testimony even on the subject of automobile design to a *Daubert* analysis. Phillips had only a bachelor's degree in engineering and his only practical experience was in designing parts for automobile air bags. Other than that, his employment has consisted entirely of consulting for purposes of litigation, primarily as an accident reconstructionist. Rule 702 requires that expert testimony come from someone who is "qualified as an expert by knowledge, skill, experience, training or education," whose testimony "will assist the trier of fact to understand the evidence or to

determine a fact in issue." Fed. R. Evid. 702. In view of Phillips's meager qualifications to offer the opinions as to automobile design that these plaintiffs rely on, the District Court's *Daubert* analysis seems almost superfluous. *See*, *e.g.*, *Nora Beverages*, *Inc. v. Perrier Group of Am., Inc.*, 164 F.3d 736, 746 (2d Cir. 1998) (upholding exclusion, under Fed. R. Evid. 702, of proffered expert who lacked relevant experience).

Finally, plaintiffs argue that *Green v. General Motors Corp.*, 709 A.2d 205 (N.J. Super. Ct. App. Div. 1998), a case in which Phillips served as an expert witness for the plaintiff, establishes the reliability of his proffered testimony in this case. In *Green*, a New Jersey appellate court affirmed a jury award in a case involving a design defect in GM's 1986 Chevrolet Camaro. *Id.* at 207. The Camaro, like the Trans Am, had a T-top, which deformed in a collision and struck the plaintiff's head. *Id.* at 208. Phillips offered an alternative design for the T-top Camaro—somewhat similar to the alternative design for the Trans Am he offers in this case—that would have two stabilizing bars or side roof rails in addition to the single longitudinal bar characteristic of the T-top. *Id.* at 213. The accident in *Green* was not a rollover, and the plaintiff was not ejected from the vehicle. Nonetheless, plaintiffs argue that *Green* reliably establishes the safety and feasability of Phillips's alternative design.

Green is unavailing to plaintiffs because it does not directly address the issues raised by a Danbert inquiry: the reliability and relevance of Phillips's expert testimony about a hypothetical alternative design. The Appellate Division did not discuss standards for the admissibility of expert testimony, but instead appeared to hold that the plaintiff had met his burden of proving to the jury, through expert testimony, a reasonable alternative design. *Id.* at 213. Because *Green* does not involve the demanding inquiry into expert testimony that *Daubert* and Rule 702 require for the

federal courts, it provides little support for plaintiffs' position that the District Court committed "manifest error" in concluding that Phillips's testimony was unreliable.

In view of the District Court's decision to exclude the testimony of plaintiffs' experts, summary judgment for defendant was appropriate. *See, e.g., Amorgianos*, 303 F.3d at 270-71 ("Having concluded that the district court did not abuse its discretion in granting defendant's *Daubert* motion, we also affirm the district court's grant of defendant's motion for summary judgment."); *Brooks*, 234 F.3d at 92 ("Having determined that the district court acted within its discretion in excluding [plaintiff's expert] testimony, the plaintiff has no evidence in the record to support his theory that the motor had a design defect which caused the accident or increased its severity. As a result, summary judgment was properly granted."). Indeed, plaintiffs do not dispute that, if we uphold the District Court's evidentiary ruling, summary judgment is appropriate.

## Conclusion

We have considered all of plaintiffs' arguments and found each of them to be without merit.

Accordingly, the judgment of the District Court is hereby **AFFIRMED**.